

5.56MM RIFLE TRAINING AID, M16A1



Training Category/Level Utilized:

Ordnance/Level 3

Physical Information:

58" x 48" x 20"; 30 lb

Logistic Responsible Command, Service, or Agency:

STRICOM

Equipment Required, Not Supplied:

None

Source and Method of Obtaining:

Available through local TSC.

Special Installation Requirements:

None

Purpose of Trainer:

For classroom use to aid instruction in the operation, assembly, and disassembly of the Rifle, M16A1, 5.56mm, and to assist in the teaching of parts recognition and nomenclature. The specific training requirements supported are shown following the descriptive data.

Power Requirements:

None

Applicable Publications:

NAVTRADEV P-3553, Guide for 2:1 Scale Mockup of M16A1 Rifle, Device 3F68

Functional Description:

The trainer is a 2:1 scale mockup of the M16A1 Rifle with all parts operable but nonfiring. The device can be manually operated through the complete cycles of semi-automatic and automatic rates of fire. It can be field-stripped and reassembled using the same procedures as with the actual rifle.

Reference Publications:

FM 23-9

Training Requirements Supported:

SM 091-63A

1120

5.56MM RIFLE TRAINING AID, M16A2

**Training Category/Level Utilized:**

Ordnance/Level 3

Logistic Responsible Command, Service, or Agency:

STRICOM

Source and Method of Obtaining:

Available through local TSC.

Purpose of Trainer:

For classroom use to aid instruction in the operation, assembly, and disassembly of the Rifle, M16A2, 5.56mm, and to assist in the teaching of parts recognition and nomenclature. The specific training requirements supported are shown following the descriptive data.

Functional Description:

The trainer is a 2:1 scale mockup of the M16A2 Rifle with all parts operable but nonfiring. The device can be manually operated through the complete cycles of semi-automatic and automatic rates of fire. It can be field-stripped and reassembled using the same procedures as with the actual rifle.

Physical Information:

58" x 48" x 20"; 30 lb

Equipment Required, Not Supplied:

None

Special Installation Requirements:

None

Power Requirements:

None

Applicable Publications:

NAVTRADEV P-3553, Guide for 2:1 Scale Mockup of
M16A1 Rifle, Device 3F68

Reference Publications:

FM 23-9

Training Requirements Supported:

SM 091-63A
1120

M35A2C TROUBLESHOOTING USING STE/ICE TRAINER

**Training Category/Level Utilized:**

Ordnance/Level 1

Logistic Responsible Command, Service, or Agency:

STRICOM

Source and Method of Obtaining:

Not generally available for issue (limited production).

Purpose of Trainer:

For classroom use to provide maintenance training and familiarization for selected systems of an M35A2C vehicle. The trainer provides organizational, direct support (DS), and general support (GS) maintenance personnel with training in operating procedures, symptom analysis, and troubleshooting procedures.

Functional Description:

Device 09-23 is a computer-based training system, providing operating and maintenance characteristics for simulated M35A2C vehicle systems.

The device consists of a display panel of simulated M35A2C system components and vehicle test meter (VTM), an EC 3 computer, video disc player and monitor, control

console, two diskette drive units, visuals, two flexible diskettes, trainer power cable, operator's manual, and maintenance manual. An accessories box containing a simulated VTM current probe, tachometer probe, two pressure transducers and four cable assemblies are also supplied with the trainer.

This student/instructor operated device is designed for demonstration or system maintenance hands-on use and requires minimal familiarization time. No warm-up time, special cooling, or special maintenance personnel are required.

Student motivation is accomplished through 32 unique malfunction simulations and immediate performance feedback as the student operates the system and VTM.

Through the use of the control console, the simulated systems on the display panel respond with normal operation or system malfunctions similar to the actual vehicle systems. Student performance is monitored by

indicators contained on the control console to indicate total time to solve the problem and components replaced.

Physical Information:

120" L x 71" H x 29" D; 485 lb

Equipment Required, Not Supplied:

None

Special Installation Requirements:

The trainer is designed to operate in a standard classroom within a temperature range of 39°F to 100°F and a relative humidity of up to 80 percent.

Power Requirements:

115 vac, single-phase, 60 Hz, 15 A

Applicable Publications:

TM 9-6910-252-10 Operator's Manual for M35A2C
Troubleshooting Using STE/ICE, Device 9-23.
TM 9-6910-252-24&P Organizational, Direct Support, and
General Support Maintenance Manual
Including Repair Parts and Special Tools List (Including
Depot Maintenance Repair Parts) for M35A2C
Troubleshooting Using STE/ICE, Device 9-23.

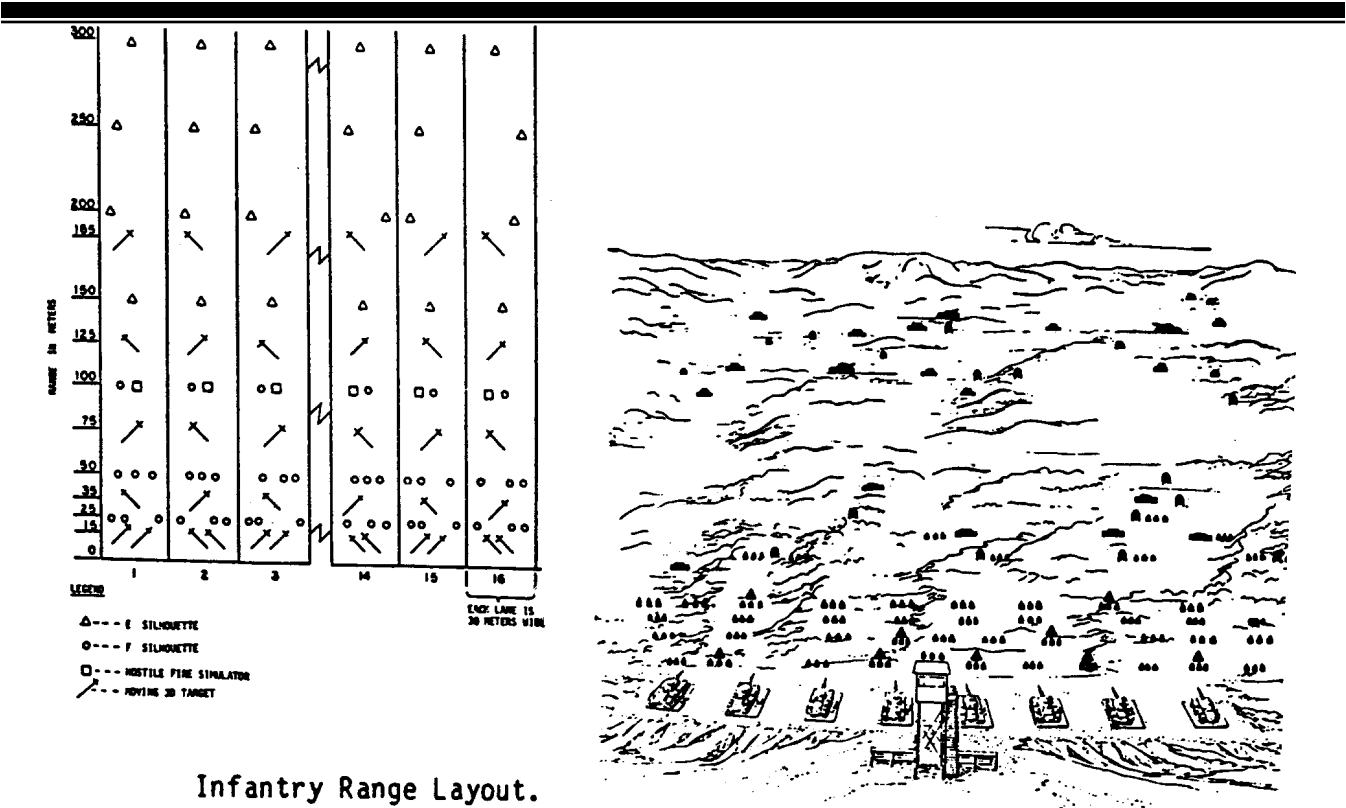
Reference Publications:

TM 9-2320-209-20
TM 9-2320-209-20-2 Series

Training Requirements Supported:

MOSC 63B
SL1 091-499 Task
1120
1122

REMOTED TARGET SYSTEM (RETS)



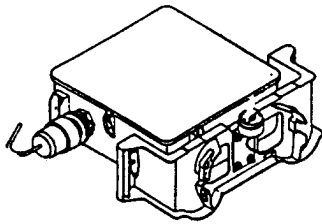
Infantry Range Layout.

Armor Range Layout.

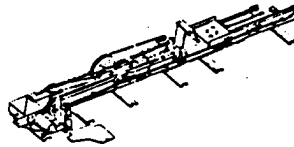
TYPICAL RETS RANGES

Training Category/Level Utilized: Infantry/Armor/Aviation/Level 1	Detailed descriptions of the major RETS component simulators and control equipment are located in this publication as follows:	
Logistic Responsible Command, Service, or Agency: ACALA	Infantry Target Mechanism (ITM)	DVC07-73
Source and Method of Obtaining: Not generally available for issue (limited production).	Infantry Moving Target Carrier (IMTC)	DVC07-74
Purpose of Trainer: The Remoted Target System (RETS) is targetry equipment which, when installed on standard Army ranges, supports marksmanship, gunnery, and combined arms training. RETS consists of stationary and moving infantry and armor target hardware with related control hardware and software. A range control station provides automatic and manual control of target mechanisms, detects and accumulates target hit data, and pints a permanent record for evaluation of the firer's or crew's performance. Simulators adding realism to training scenarios include infantry night muzzle flash, armor target kill, and infantry and armor hostile fire simulators.	Rifle Fire Simulator (RFS)	DVC07-75
	Range Control Station (RCS)	DVC11-51
	Target Holding Mechanism Tank Gunnery (THMTG)	DVC17-63
	Armor Moving Target Carrier (AMTC)	DVC17-131
	RETS Gunfire Simulator (GUFS)	DVC17-133
	Other optional components are used. Range layouts vary according to mission and available range location.	
	Functional Description: RETS targets are raised and lowered by electromechanical and hydraulic devices that are actuated and monitored by a computer system located in the Range Control Station. Automatic and manual controls are available. Scoring of	

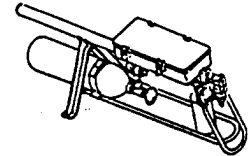
Infantry Target Mechanism (ITM)



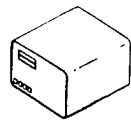
Infantry Moving Target Carrier (IMTC)



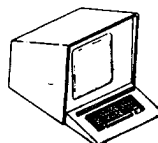
Rifle Fire Simulator (RFS)



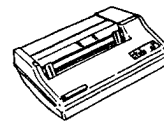
Range Control Station (RCS)



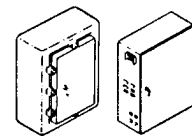
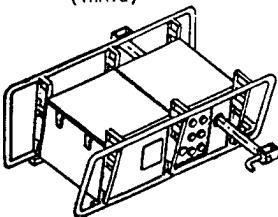
Processor Assembly



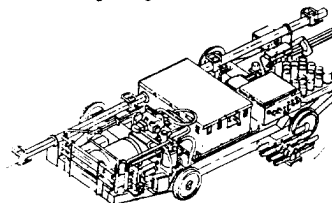
Keyboard/Display Unit



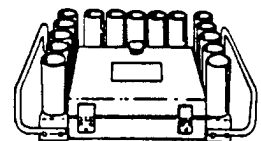
Scoring Printer

Signal Distribution
Assembly and Tower JunctionTarget Holding Mechanism Tank Gunnery
(THMTG)

Armor Moving Target Carrier (AMTC)



Target Kill Simulator (TKS)



RETS RANGES MAJOR COMPONENTS

individual and/or range performance is also processed. Moving targets are operated on track-mounted carriers. Muzzle and rifle fire simulators using light-emitting diodes (LED), target kill (pyrotechnic) simulators, and gas fired (propane/oxygen) gunfire simulators may be mounted on target holding mechanisms and carriers.

Physical Information:

Refer to descriptions of individual components listed above.

Equipment Required, Not Supplied:

None

Special Installation Requirements:

Sufficient space is required to emplace range equipment with electrical power accessibility and range safety considerations taken into account.

Power Requirements:

Varies

Applicable Publications:

TM 9-6920-742-14-1

TM 9-6920-742-24P-1

Reference Publications:

TM 9-6920-742-14-2 thru -6

TM 9-6920-742-24P-2 thru -6

Training Requirements Supported:

Infantry/Armor/Aviation MOSC's

(not drawn to same scale)

AERIAL WEAPONS SCORING SYSTEM (AWSS)

(PICTURE NOT AVAILABLE)

Training Category/Level Utilized:

(Information not available)

Logistic Responsible Command, Service, or Agency:

(Information not available)

Source and Method of Obtaining:

(Information not available)

Purpose of Trainer:

To provide objective scoring (at individual and crew level) of weapons systems employed from attack, armed reconnaissance, utility, and cargo helicopters. AWSS is contractor operated and transparent to the supported unit.

Functional Description:

The AWSS is an integrated group of computer controlled sensors used to detect and score 2.75 inch rockets and cannon/machine gun engagements during conduct of live-fire training and qualification tables. The LASS is a sub-component of the AWSS; it detects and "scores" designated laser energy when employed with the Hellfire training missile. The AWSS is an integrated group of computer-controlled sensors used to score crew live fire gunnery exercises at designated ranges. The system has Doppler radar sensors to score .50 caliber, 20mm, and 30mm cannons. It has acoustical sensors to score rocket, and rocket sub-munitions. The

system also has an integrated data link subsystem and a computer subsystem to process data and to provide scoring results. There are two mobile systems in CONUS that are contractor maintained and operated. Setup of the system requires two days and one day to take down.

Physical Information:

(Information not available)

Equipment Required, Not Supplied:

(Information not available)

Special Installation Requirements:

(Information not available)

Power Requirements:

(Information not available)

Applicable Publications:

(Information not available)

Reference Publications:

(Information not available)

Training Requirements Supported:

(Information not available)

HELLFIRE MISSILE DUMMY GROUND CREW TRAINER

(PICTURE NOT AVAILABLE)

Training Category/Level Utilized:

(Information not available)

Equipment Required, Not Supplied:

(Information not available)

Logistic Responsible Command, Service, or Agency:

(Information not available)

Special Installation Requirements:

(Information not available)

Source and Method of Obtaining:

(Information not available)

Power Requirements:

(Information not available)

Purpose of Trainer:

Trains Hellfire missile loading procedures and provides the weighted conditions of a loaded missile.

Applicable Publications:

(Information not available)

Functional Description:

The HDM is a completely inert replica of a Hellfire missile that has the weight of the actual missile.

Reference Publications:

(Information not available)

Physical Information:

(Information not available)

Training Requirements Supported:

(Information not available)

HELLFIRE MISSILE LAUNCH SIMULATOR

(PICTURE NOT AVAILABLE)

Training Category/Level Utilized:

(Information not available)

Physical Information:

(Information not available)

Logistic Responsible Command, Service, or Agency:

(Information not available)

Equipment Required, Not Supplied:

(Information not available)

Source and Method of Obtaining:

(Information not available)

Special Installation Requirements:

(Information not available)

Purpose of Trainer:

To provide on-board procedural training on the employment of Semi-Automatic Laser (SAL) Hellfire missiles during simulated target engagements.

Power Requirements:

(Information not available)

Applicable Publications:

(Information not available)

Functional Description:

The SAL Hellfire Missile Launch Simulator is an inert Hellfire missile with a functional SAL seeker head and can be mounted on the launcher rail for training purposes. When activated, it simulates the SAL missile engagement process. The crew must perform the same procedures and meet the same conditions and constraints required in an actual tactical engagement. During the simulated engagement process, the crew receives the same system cues that would be present in an actual engagement.

Reference Publications:

(Information not available)

Training Requirements Supported:

(Information not available)

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